ABSTRACT OF THE DISCLOSURE

A method of producing a tissue-engineered vascular vessel by providing a vessel-forming mixture of fibrinogen, thrombin, and cells, molding the vessel-forming mixture into a fibrin gel having a tubular shape, and incubating the fibrin gel in a medium suitable for growth of the cells. The resulting tissue-engineered vascular vessel and a method of producing a tissue-engineered vascular vessel for a particular patient are also disclosed.